

IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF PENNSYLVANIA

PAMELA LEWIS, et al.	:	CIVIL ACTION
	:	
v.	:	
	:	
LYCOMING, et al.	:	NO. 11-6475

MEMORANDUM

Bartle, J.

May 29, 2015

Pamela Margaret Lewis, individually and as personal representative of the estate of Steven Edward Lewis, and Keith Whitehead and John Joseph Wroblewski as co-personal representatives of the estate of Philip Charles Gray (collectively "plaintiffs") have brought this diversity action against defendants Avco Corporation and Lycoming Engines (collectively "Avco") as well as against Schweizer Aircraft Corporation.<sup>1</sup> The lawsuit arises out of a helicopter crash that occurred on September 22, 2009 near Blackpool in Lancashire, England. Lewis and Gray were both killed in the incident. The complaint, which was originally filed in the Court of Common Pleas of Philadelphia County and removed here, contains claims for damages on theories of product liability, negligence, breach of warranty, and concert of action.

Before the court is the motion of Avco under Daubert v. Merrel Dow Pharmaceuticals, 509 U.S. 579 (1993), to exclude the

---

<sup>1</sup> Plaintiffs additionally brought suit against Textron, Inc., Textron Systems Corporation, Precision Airmotive LLC, Precision Airmotive Corporation, Schweizer Holdings, Inc., Sikorsky Aircraft Corporation, United Technologies Corporation, and Champion Aerospace LLC. These defendants have been dismissed.

expert testimony of Arthur "Lee" Coffman ("Coffman") and Mark Seader ("Seader").

I.

The court has a "gatekeeping" function in connection with expert testimony. See Gen. Elec. Co., et al. v. Joiner, 522 U.S. 136, 142 (1997); see also Daubert, 509 U.S. at 589.

Rule 702 of the Federal Rules of Evidence provides:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

- (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.

As our Court of Appeals has repeatedly noted, Rule 702 embodies three requirements: qualification, reliability, and fit.

Schneider ex rel. Estate of Schneider v. Fried, 320 F.3d 396, 404 (3d Cir. 2003).

An expert is qualified if he or she "possess[es] specialized expertise." Id. This does not necessarily require formal credentials, as "a broad range of knowledge, skills, and training qualify an expert," including informal qualifications

such as real-world experience. In re Paoli R.R. Yard PCB Litig., 35 F.3d 717, 741 (3d Cir. 1994). The qualification standard is a liberal one. Holbrook v. Lykes Bros. S.S. Co., Inc., 80 F.3d 777, 782 (3d Cir. 1996). An expert may not be excluded under Rule 702 "simply because the trial court does not deem the proposed expert to be the best qualified or because the proposed expert does not have the specialization that the court considers most appropriate." Id.

To determine reliability, we focus not on the expert's conclusion but on whether that conclusion is "based on the methods and procedures of science rather than on subjective belief or unsupported speculation." Schneider, 320 F.3d at 404 (internal quotation marks omitted). Our analysis may include such factors as:

(1) whether a method consists of a testable hypothesis; (2) whether the method has been subject to peer review; (3) the known or potential rate of error; (4) the existence and maintenance of standards controlling the technique's operation; (5) whether the method is generally accepted; (6) the relationship of the technique to methods which have been established to be reliable; (7) the qualifications of the expert witness testifying based on the methodology; and (8) the non-judicial uses to which the method has been put.

Pineda v. Ford Motor Co., 520 F.3d 237, 247-48 (3d Cir. 2008).

"[T]he test of reliability is flexible," and this court possesses a broad latitude in determining reliability. Kumho Tire Co., Ltd. v. Carmichael, 526 U.S. 137, 141-42 (1999) (internal quotation marks omitted). To be reliable under Daubert, a party need not prove that his or her expert's opinion is "correct." Paoli, 35 F.3d at 744. Instead:

As long as an expert's scientific testimony rests upon good grounds, based on what is known, it should be tested by the adversary process -- competing expert testimony and active cross-examination -- rather than excluded from jurors' scrutiny for fear that they will not grasp its complexities or satisfactorily weigh its inadequacies.

United States v. Mitchell, 365 F.3d 215, 244 (3d Cir. 2004) (internal quotation marks omitted) (quoting Ruiz-Troche v. Pepsi Cola Bottling Co., 161 F.3d 77, 85 (1st Cir. 1998)).

As for "fit," expert testimony must also "help the trier of fact to understand the evidence or to determine a fact in issue." Fed. R. Evid. 702. That is, the proffered testimony must be relevant. Daubert v. Merrell Dow Pharms., Inc., 509 U.S. 579, 591 (1993); Paoli, 35 F.3d at 745 & n.13. To "fit," such evidence must bear some relation to the "particular disputed factual issues in the case." United States v. Downing, 753 F.2d 1224, 1237 (3d Cir. 1985).

## II.

Plaintiffs have engaged Arthur "Lee" Coffman and Mark Seader as their engine experts. Coffman and Seader plan to testify at trial that a defectively designed or manufactured fuel servo caused the helicopter crash at issue in this action. The fuel servo is a component of the aircraft's engine designed to regulate the fuel-air mixture introduced into the engine's cylinders for combustion. According to plaintiffs' experts, the servo in the subject helicopter suffered from a fuel leak which caused an overly rich fuel-air mixture to be sent to the engine and a consequent loss of engine power. Avco seeks to preclude this testimony.

Coffman has been an aircraft mechanic since 1964 and also has long experience in forensic aircraft investigation. He additionally served for a time as the quality control manager at a major aircraft parts supplier. Seader has worked as an aircraft mechanic since 1970 and has been conducting aviation accident investigations since 2003. He has designed and obtained FAA approval for numerous aircraft parts modifications.

Plaintiffs' experts are qualified under Daubert. Coffman and Seader have decades of relevant experience in aircraft maintenance and investigation. While Avco maintains that neither individual is an engineer and neither has experience designing engine parts sufficient to testify as to fuel servo design, it is

uncontested that both have gained extensive familiarity with aircraft mechanics over many years of relevant work. Indeed, Coffman has experience maintaining the very model of helicopter that crashed here, and Seader has overhauled the type of fuel servo at issue in this action hundreds of times. While there may be engineering or design experts more qualified, Coffman and Seader possess the specialized expertise necessary to opine on the matter at hand. Schneider ex rel. Estate of Schneider v. Fried, 320 F.3d 396, 404 (3d Cir. 2003); Holbrook v. Lykes Bros. S.S. Co., 80 F.3d 777, 782 (3d Cir. 1996). Any gap in their qualifications goes to the weight of their testimony rather than its admissibility.

We further conclude that the testing upon which these experts based their opinions is reliable for Daubert purposes. Coffman and Seader independently conducted or reviewed several tests of the subject fuel servo and an exemplar servo as well. Seader further reviewed a CT scan of the subject fuel servo.<sup>2</sup> Avco contends that the testing is not reliable because it was conducted some three years after the accident and was inconsistent with the findings of a post-accident investigation conducted in England. However, Avco

---

<sup>2</sup> Avco argues that Seader lacks the training or qualifications necessary to opine on the results of CT scans. In light of his familiarity with the fuel servo presented in the scans, Avco's position is without merit.

identifies no flaws in the methodologies used. Any discrepancy in different investigators' observations is for the jury to weigh at trial.

Finally, the conclusions of plaintiffs' experts are relevant to the cause of the helicopter crash and thus "fit" the matter at hand. Daubert v. Merrell Dow Pharms., Inc., 509 U.S. 579, 591 (1993); In re Paoli R.R. Yard PCB Litig., 35 F.3d 717, 745 & n.13 (3d Cir. 1994). Although Avco takes issue with the failure of Coffman and Seader to identify one single cause for the purported fuel leak, plaintiffs' experts declined to perform the additional testing required to reach such a narrow conclusion because it would risk damage to the fuel servo's parts. In any event, such specificity is not required. See, e.g., Nationwide Ins. Co. v. Sears, Roebuck & Co., Civil Action No. 11-7866, 2013 WL 1389766, at \*3 (E.D. Pa. Apr. 3, 2013).

Accordingly, the motion of Avco to exclude the expert testimony of Coffman and Seader will be denied. We stress that our holding is limited to the conclusion that plaintiffs have met the threshold standard of admissibility for these experts under Rule 702 and Daubert. We are making no determination at this time of the cause of the helicopter crash, nor are we making any conclusion that plaintiffs' experts are entitled to more or less credence than any other expert proffered in this action.